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REMARKS

Reconsideration of the application in view of the present amendment is respectfully requested.

The Office Action rejects claims 1, 2, 6-9, 13-16, 18, 28-31, 35, 41-43, 45, 48-50, 53-55 and 57-59 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,864,584 to Boyle. The Office Action also rejects claims 3-5, 32-34, 51, 52, 59-61 and 63-68 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of U.S. Patent Application No. 2002/0046348 to Brustoloni. In addition, the Office Action rejects claims 10, 11, 17, 19-25, 44, 46, 47, 51, 56 and 69 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of U.S. Patent No. 6,300,863 to Cotichini et al. (referred to herein as "Cotichini"). Further, the Office Action rejects claims 12, 26 and 27 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of U.S. Patent Application No. 2003/0061353 to Johnson et al. (referred to herein as "Johnson"). Likewise, the Office Action rejects claims 36, 39 and 40 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of U.S. Patent No. 6,768,743 to Borella et al. (referred to herein as "Borella"). Finally, the Office Action rejects claim 38 under 35 U.S.C. § 103(a) as being unpatentable over Boyle in view of Borella, further in view of Cotichini.

Claims 1-69 are rejected under the judicially created doctrine of obviousness-type double patenting. A terminal disclaimer is enclosed herewith.

Claims 1-69 are canceled. Claims 70-97 are newly added. Accordingly, claims 70-97 are pending.

Claim 70 recites a method of a server downloading data via a client-server communications network. The method comprises receiving a request for data from a client, determining if the request for data can be fulfilled within a predetermined target period, and sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period.

Applicant notes from the Office Action that the Examiner refers to paragraph [0059] of Brustoloni for teachings lacking in Boyle. In this regard, Applicant would like to

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respectfully point out that the Examiner's interpretation of Brustoloni is incorrect as explained hereinbelow.

With reference to paragraph [0059] of Brustoloni, Applicant would like to respectfully point out that Brustoloni discloses a method for negotiating and switching to a new tunnel epoch within an internet key exchange (IKE) session between a client and a server prior to the end of a current epoch. As part of this method, the client in Brustoloni sends a "ping" to the server if negotiation of the new epoch is completed within a predetermined timeout period ("TIMEOUT"), and starts sending and receiving data using the new epoch's keys and security parameters indices (SPIs) if it receives a response from the server before a predetermined timeout period ("PINGTIME"). A client sending a ping to a server and waiting for a reply as a precondition to switching to a new epoch (as disclosed in Brustoloni) is not the same as a server sending a proxy list to a client comprising an address of at least one proxy server client which stores requested data in a local cache if a request for data can not be fulfilled within a predetermined target period (as claimed in claim 70 of the present application).

None of the cited references discloses or suggests a method of a server downloading data via a client-server communications network, wherein the method comprises receiving a request for data from a client, determining if the request for data can be fulfilled within a predetermined target period, and sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period. Thus, claim 70 of the present application patentably defines over the references of record, whether taken singularly or taken in combination, and is therefore allowable.

Claim 71 depends from claim 70 and is allowable for the reasons claim 70 is allowable and for the specific limitations recited therein. Claim 71 further recites that the predetermined target period is variable. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 71 in combination with the structure recited in claim 70. Thus, claim 71 patentably defines over the prior art

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including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 72 depends from claim 71 and is allowable for the reasons claim 71 is allowable and for the specific limitations recited therein. Claim 72 further recites that the predetermined target period varies as a function of a client-server connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 72 in combination with the structure recited in claim 71. Thus, claim 72 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 73 depends from claim 72 and is allowable for the reasons claim 72 is allowable and for the specific limitations recited therein. Claim 73 further recites that the predetermined target period is shortened when the client-server connection speed is relatively fast and lengthened when the client-server connection speed is relatively slow. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 73 in combination with the structure recited in claim 72. Thus, claim 73 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 74 depends from claim 70 and is allowable for the reasons claim 70 is allowable and for the specific limitations recited therein. Claim 74 further recites maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 74 in combination with the structure recited in claim 70. Thus, claim 74 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 75 depends from claim 74 and is allowable for the reasons claim 74 is allowable and for the specific limitations recited therein. Claim 75 further recites receiving cache status change reports from the one or more proxy server clients at which the items of data are cached, and updating the look-up table using the cache status change reports. None

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of the prior art including the prior art references of record discloses or suggests the structure recited in claim 75 in combination with the structure recited in claim 74. Thus, claim 75 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 76 depends from claim 74 and is allowable for the reasons claim 74 is allowable and for the specific limitations recited therein. Claim 76 further recites assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table, and discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 76 in combination with the structure recited in claim 74. Thus, claim 76 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 77 depends from claim 70 and is allowable for the reasons claim 70 is allowable and for the specific limitations recited therein. Claim 77 further recites receiving an address of a proxy server client that provided requested data, and assembling an address list of proxy server clients most commonly accessed to obtain requested data. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 77 in combination with the structure recited in claim 70. Thus, claim 77 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 78 depends from claim 70 and is allowable for the reasons claim 70 is allowable and for the specific limitations recited therein. Claim 78 further recites that the proxy list comprises addresses of proxy server clients whose workload is below a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 78 in combination with the structure recited in claim 70. Thus, claim 78 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

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Claim 79 depends from claim 70 and is allowable for the reasons claim 70 is allowable and for the specific limitations recited therein. Claim 79 further recites that the network comprises the Internet, the at least one proxy server client comprises a user terminal running a web browser, and the respective local cache is associated with the web browser on the user terminal. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 79 in combination with the structure recited in claim 70. Thus, claim 79 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 80 recites a client-server communications network comprising a plurality of clients. Each client includes a local cache for storing data downloaded via the network. The network further comprises a server including means for receiving a request for data from a client, means for determining if the request for data can be fulfilled within a predetermined target period, and means for sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period.

None of the prior art including the prior art references of record discloses or suggests a client-server communications network comprising a plurality of clients, each client including a local cache for storing data downloaded via the network, and a server including means for receiving a request for data from a client, means for determining if the request for data can be fulfilled within a predetermined target period, and means for sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period. Thus, claim 80 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 81 depends from claim 80 and is allowable for the reasons claim 80 is allowable and for the specific limitations recited therein. Claim 81 further recites that the predetermined target period is variable. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 81 in combination with the structure recited in claim 80. Thus, claim 81 patentably defines over the prior art

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including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 82 depends from claim 81 and is allowable for the reasons claim 81 is allowable and for the specific limitations recited therein. Claim 82 further recites that the server includes means for sensing a client-server connection speed, and means for varying the predetermined target period based upon the client-server connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 82 in combination with the structure recited in claim 81. Thus, claim 82 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 83 depends from claim 80 and is allowable for the reasons claim 80 is allowable and for the specific limitations recited therein. Claim 83 further recites that the server includes means for maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 83 in combination with the structure recited in claim 80. Thus, claim 83 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 84 depends from claim 83 and is allowable for the reasons claim 83 is allowable and for the specific limitations recited therein. Claim 84 further recites that the server includes means for receiving cache status change reports from the one or more proxy server clients at which the items of data are cached, and means for updating the look-up table using the cache status change reports. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 84 in combination with the structure recited in claim 83. Thus, claim 84 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 85 depends from claim 83 and is allowable for the reasons claim 83 is allowable and for the specific limitations recited therein. Claim 85 further recites that the

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server includes means for assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 85 in combination with the structure recited in claim 83. Thus, claim 85 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 86 depends from claim 80 and is allowable for the reasons claim 80 is allowable and for the specific limitations recited therein. Claim 86 further recites that the server includes means for receiving an address of a proxy server client that provided requested data, and means for assembling an address list of proxy server clients most commonly accessed to obtain requested data. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 86 in combination with the structure recited in claim 80. Thus, claim 86 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 87 depends from claim 80 and is allowable for the reasons claim 80 is allowable and for the specific limitations recited therein. Claim 87 further recites that the proxy list comprises addresses of proxy server clients whose workload is below a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 87 in combination with the structure recited in claim 80. Thus, claim 87 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 88 depends from claim 80 and is allowable for the reasons claim 80 is allowable and for the specific limitations recited therein. Claim 88 further recites that the network comprises the Internet, the plurality of clients comprise user terminals running web browsers, and the respective local caches are associated with the browsers on the user terminals. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 88 in combination with the structure recited in claim

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80. Thus, claim 88 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 89 recites a server for a client-server communications network. The server comprises means for receiving a request for data from a client, means for determining if the request for data can be fulfilled within a predetermined target period, and means for sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period.

None of the prior art including the prior art references of record discloses or suggests a server for a client-server communications network, wherein the server comprises means for receiving a request for data from a client, means for determining if the request for data can be fulfilled within a predetermined target period, and means for sending to the client a proxy list comprising an address of at least one proxy server client which stores requested data in a local cache if the request for data is unable to be fulfilled within the predetermined target period. Thus, claim 89 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 90 depends from claim 89 and is allowable for the reasons claim 89 is allowable and for the specific limitations recited therein. Claim 90 further recites that the predetermined target period is variable. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 90 in combination with the structure recited in claim 89. Thus, claim 90 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 91 depends from claim 90 and is allowable for the reasons claim 90 is allowable and for the specific limitations recited therein. Claim 91 further recites means for sensing a client-server connection speed, and means for varying the predetermined target period based upon the client-server connection speed. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 91 in combination with the structure recited in claim 90. Thus, claim 91 patentably defines over

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the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 92 depends from claim 89 and is allowable for the reasons claim 89 is allowable and for the specific limitations recited therein. Claim 92 further recites means for maintaining a look-up table which correlates items of data with addresses of one or more proxy server clients at which the items of data are cached. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 92 in combination with the structure recited in claim 89. Thus, claim 92 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 93 depends from claim 92 and is allowable for the reasons claim 92 is allowable and for the specific limitations recited therein. Claim 93 further recites means for receiving cache status change reports from the one or more proxy server clients at which the items of data are cached, and means for updating the look-up table using the cache status change reports. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 93 in combination with the structure recited in claim 92. Thus, claim 93 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 94 depends from claim 92 and is allowable for the reasons claim 92 is allowable and for the specific limitations recited therein. Claim 94 further recites means for assessing connection speeds to the one or more proxy server clients whose addresses are contained in the look-up table, and means for discarding or demoting the addresses of proxy server clients having relatively slow connection speeds. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 94 in combination with the structure recited in claim 92. Thus, claim 94 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 95 depends from claim 89 and is allowable for the reasons claim 89 is allowable and for the specific limitations recited therein. Claim 95 further recites means for

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receiving an address of a proxy server client that provided requested data, and means for assembling an address list of proxy server clients most commonly accessed to obtain requested data. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 95 in combination with the structure recited in claim 89. Thus, claim 95 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 96 depends from claim 89 and is allowable for the reasons claim 89 is allowable and for the specific limitations recited therein. Claim 96 further recites that the proxy list comprises addresses of proxy server clients whose workload is below a workload limit. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 96 in combination with the structure recited in claim 89. Thus, claim 96 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

Claim 97 depends from claim 89 and is allowable for the reasons claim 89 is allowable and for the specific limitations recited therein. Claim 97 further recites that the network comprises the Internet. None of the prior art including the prior art references of record discloses or suggests the structure recited in claim 97 in combination with the structure recited in claim 89. Thus, claim 97 patentably defines over the prior art including the prior art references of record, whether taken singularly or in combination, and is therefore allowable.

In view of the foregoing, it is submitted that the application is in condition for allowance, and allowance of the application is respectfully requested.

Respectfully submitted,



Michael Chan  
Reg. No. 33,663  
Attorney for Applicant

NCR Corporation, Law Department, WHQ4  
1700 S. Patterson Blvd., Dayton, OH 45479-0001  
Tel. No. 937-445-4956/Fax No. 937-445-6794  
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